

HISTORY
COLLEGE OF MEDICINE
1959-1968

CHAPTER - 15

DEPARTMENT OF PHYSICAL MEDICINE

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Associate Professor
Physical Medicine

I. Introduction: Organization

Under the Chairmanship of Ernest W. Johnson, M.D., the department has continued to improve and enlarge residency training programs, its undergraduate teaching programs and its clinical services in the University Hospitals and several area hospitals, including the department of Physical Medicine at Children's Hospital.

In 1961, by Legislative action, the facility of the Ohio Rehabilitation Center, consisting of sixty thousand square feet including 32 beds, shops, treatment areas, classrooms, dining and other supporting facilities was turned over to the University. It was renamed Dodd Hall and became one of the University Hospitals and the principal facility of the division of Physical Medicine. In 1963, the structure of the college was changed by action of the Board of Trustees so that the division of Physical Medicine became a separate department within the College of Medicine.

Currently the department provides for three beginning residencies each year, or a total of 9 residents at any time.

The clinical services of the department are divided into three elements: Physical Medicine, Clinical Rehabilitation (Rehabilitation Services), and the out patient services. There are two non-clinical divisions, Biophysics and division of Disability Research.

A strong interdisciplinary staff has been developed for both the teaching and

service functions of the department. Currently the staff consist of:

- Eight geographic full time physiatrists
- One part time physiatrist
- One Rehabilitation Counselor
- One Biophysist
- One Psychologist
- Two Psychiatrists (Part-Time)
- One Pediatrician (Part-Time)
- One Internist (Part-Time)
- Three Social Workers
- One Speech Pathologist
- One Vocational (Shop) Evaluator
- One Orthotist
- Two Prosthetists (Part-Time)
- One Rehabilitation Research Director
- Two Medical Sociologists

II. Educational Activities and Program

In addition to its residency program for physiatrists, the department provides formal, supervised clinical training for virtually all members of the rehabilitation team. Included are psychiatry, psychology, nursing, speech, social work, physical therapy, dietetics, occupational therapy, medical sociology, and research.

The department is also active in extra mural education. Since 1962, by arrangement with the State Health Department, it has offered a series of two-week institutes in rehabilitation nursing to public health nurses. These institutes provided both didactic training and clinical experience to approximately 12 nurses 10 times each year.

In cooperation with the Center for continuing Medical Education (and other agencies) the department offers annual short term institutes on multiple sclerosis, muscular dystrophy, electromyography, as well as occasional institutes

for child welfare workers, crippled children personnel, and insurance claim adjusters. The department also has a continuing relationship with the Ohio Bureau of Vocational Rehabilitation for the training and upgrading of the rehabilitation counselors on that staff. During the past year, it has also been active in the social and health programs of the Ohio AFL-CIO.

UNDERGRADUATE MEDICINE

From its inception as a division of Medicine in 1950 to 1964, the major teaching experience was 3-4 hours demonstration to the 4th year students. With the curriculum revision in 1964, a new required course, Medical Rehabilitation was offered to the 4th year students. Two elective courses, Clinical Physical Medicine and Rehabilitation (Physical Medicine 735) were offered to 3rd and 4th year students. This course was 1-3 months full time. A similar elective in Biophysical or Clinical research was offered. The department participated in planning a new course, Human Relations for 1st year students and provides 1/4 of faculty preceptors.

A five year teaching grant was awarded also, by the Rehabilitation Service Administration of the Department of Health, Education and Welfare for undergraduate medical rehabilitation in 1963 and has been renewed in 1967.

GRADUATE MEDICINE

A Masters of Medical Science was offered through the Department of Medicine until 1963 when the Department of Physical Medicine was created.

The following residents received this degree:

Richard D. Burk	1955
Richard Baer	1956
Ernest Johnson	1957
Toshi Tajima	1958
Herbert Fisher	1959
Robert Jebson	1960
John Guyton	1961
Marvin Spiegel	1961
Harry Ingberg	1962
Robert Wells	1962
William Earl	1963
Robert Baer	1964
Alexander Raptou	1965
George Waylonis	1965
Myron LaBan	1966
John Melvin	1966

In 1967 the Board of Trustees passed the proposal to change the M.M.S. to a Master of Science in Physical Medicine. Dr. George Kraft was the first resident to receive it in 1967. Dr. Nicholas S. Checkles received a M.S. in 1968.

Residents completing training but not completing requirements for the Masters degree included:

Leo French	1959
Karl Olsen	1959
Roy Starkey	1962
James Bailey	1968

The Vocational Rehabilitation Administration (now RSA) supported the residency training program from 1958.

III. Research Program

A. DIVISION OF DISABILITY RESEARCH

A program of "Social Research" was initiated in 1959 as part of the Ohio Rehabilitation Center with the purpose of pursuing studies in disability and rehabilitation. The primary interest was in the Center's clients and in the populations of potential applicants for the Center's services. In 1961, the

program's scope was expanded to include research related to other problems in the fields of disability and rehabilitation, and to utilize samples of populations other than those admitted to the Center. When the Center became part of the University's College of Medicine and Hospitals and was integrated with the Department of Physical Medicine, the research program also became part of the Department.

Support for the program was sought and obtained from agencies for research grants primarily from the Social and Rehabilitation Services Administration and the Social Security Administration. In 1967 the program attained the status of a division of Disability Research in the Department. It deals with a variety of studies in disability and rehabilitation. Over the last three years support in the form of grants for research in the Division averaged \$175,000 annually. Over the same period, the number of people engaged in this research varied from 20 to 25. Since the development of this program, 30 papers and reports have been prepared. Some of these have been published, others accepted for publication, and some are in the form of final manuscripts. In addition, 25 M.A. theses and Ph.D. dissertations have been completed utilizing data from research conducted in this program.

B. BIOPHYSICS RESEARCH DIVISION

Teaching, service, consultation and research comprise the activity in the biophysical area of Physical Medicine during the period 1958-1969.

A survey course in physics for physical therapists was taught from 1958-1966 and participation in the teaching of certain courses in the program of graduate

medical education for residents in the Department was carried out. A few residents have carried out research for Master's degree theses in the biophysics area. One student in the Biophysics Division of the University conducted his dissertation research in our laboratory.

The staff in the biophysical area of Physical Medicine have supplied service in maintenance on and design of instrumentation for use in our department and elsewhere in the College of Medicine and the University. Consultation on research methods and techniques have been given by our staff to others in the College of Medicine.

The central core of the research effort in the biophysical area has been and continues to be the study of the rate of blood flow in the end circulation or microcirculation. A major effort has been devoted to the development of methods for the quantitative study of the microcirculation. Studies have been conducted on the flow in skin and muscle in the human, on the distribution of flow in the dog kidney and, most recently, on capillary flow in frog tongue, brain and urinary bladder. Biomedical instrumentation, principally electronic, has been a prominent second research interest in our laboratory. Within the past two years a significant fraction of our overall research activity has been in the investigation of the electrical conductivity of animal and plant tissues.

Our research has been supported by specific grants from the National Heart Institute, by institutional grants from the National Institutes for Health and by a grant from the Van Wert United Health Fund.

During the academic year 1960-61, R. W. Stow was a Fulbright Lecturer in Physiology at the University of Tehran, Iran. Our electronics technician, J. A. Gray,

has brought distinction to the department by his outstanding performance in wheelchair athletic games both in the United States and internationally in the Paralympic Games in 1966 and 1968.

C. APPLIED CLINICAL RESEARCH

The major thrust of clinical research has been in electrodiagnosis. Motor and sensory conduction studies have been reported in a variety of clinical conditions and techniques described for femoral nerve motor conduction and median and ulnar sensory fibers. Electrodiagnosis studies of carpal tunnel syndrome have been extensive.

The reputation of the department as a major teaching and research center in Electrodiagnosis provided impetus for an annual course in Electromyography eagerly sought by clinicians from all over U.S. and Canada (1963-1969).

IV. Facilities

The Ohio Rehabilitation Center began as a leased ward (30 beds) as the 3rd floor of the Ohio TB Hospital with the other clinical treatment facilities on 2-W University Hospital. With the construction of the Ohio Rehabilitation Center, many of the clinical staff moved from 2-W which then became the O.T. and P.T. treatment area for inpatients at University Hospital.

In 1968 (July) the addition began for Dodd Hall (Formerly Ohio Rehab Center) an additional floor for 40 beds plus doubling the first floor and air conditioning the entire building.

At Children's Hospital, the Sellers Wing was completed in 1958 to provide new facilities for the Pediatric Department of Physical Medicine and Rehab.

Mt. Carmel Department of Physical Medicine was affiliated for resident and medical student (Physical Medicine and Rehab) in 1958 and now provides a major educational area for resident training; elective clinical experience for 3rd and 4th year medical students as well as physical diagnosis course.

V. Biographies

Checkles, Nicholas S.

B.S., U. of Toledo 1952; M.S., U. of Cincinnati 1956; M.S., O.S.U., 1968;
Assist. Prof. 1968 -

Earl, William

B.S. Capital U. 1955; M.D., O.S.U. 1959; Instr. 1961-1965; Assist. Prof.
1965 -

Guyton, John

B.S., Geneva Coll., Pa. 1951; M.D., Temple U., Philadelphia, Pa. 1954;
M.S., O.S.U. 1961; Assist., Dept. of Med. 1958-1960; Lecturer, P.T.
Curriculum 1958-1961; Assist Instr., Dept. of Med. 1960-1961; Instr.,
Dept. of Anatomy 1959; Assist. Prof. 1961-1964; Assoc. Prof. 1964 -

Haas, Adolf

See Dept. of psychiatry

Hamilton, Kenneth

B.S., Boston U. 1939; Assoc. Prof. Social Work 1944 -; Assoc. Dir. Rehab.
Service 1952 -; Assoc. Prof. 1964 -

Johnson, Ernest

B.A., O.S.U. 1948; M.D., O.S.U. 1952; M.S., O.S.U. 1957; Prof. and
Chairman 1963 -

MacLean, Ian C.

A.B., U. of Calif. 1958; M.D., U. of Calif. 1961; Assist. Prof., O.S.U.
1967 -; Consultant in Phys. Med. and Rehab., Veterans Adm. Hosp., Dayton
1967 -

Melvin, John

B.S., Oberlin Coll 1955; M.D., O.S.U. 1960; Assist. Prof. 1966-1969;
Assoc. Prof. 1969 -

Nagi, Saad

B.S., Cairo U. 1947; M.S., U. Missouri 1954; Ph.D., O.S.U. 1958; Assoc.
Prof. 1964-1968; Prof. 1969 -

Spiegel, Marvin H.

B.S., U. of Cinn. 1951; M.D., U. of Cinn 1955; M.S. (Master of Medical Science) 1961; Chief, Amputee Clinic 1966 -; Assoc. Prof. 1969 -; Director of Rehab. Service 1966 -

Stow, Richard

B.S., Michigan State 1937; M.S., Penn State U. 1941; Ph.D., U. of Minn. 1953; Assoc. Prof. 1958 -; Assoc. Prof. Physiology Dept. 1958 -

Taylor, George

B.A., Midland Coll., Neb. 1958; M.A., U. of Chicago 1959; Ph.D., U. of Minn. 1967; Assist. Prof. 1968 -

Waylonis, George

B.A., Western Reserve 1956; M.D., Western Reserve 1960; Teaching Assist. 1961-1964; Assist. Prof. 1966 -

Schuler, Jean

B.A., Michigan State U. 1949; M.S. Speech and Hearing Sc. 1967; Speech Consultant 1966-1967; Instr 1968 -